Avid

Avid® Deko® Application Note

Using External Peripheral Devices with Avid's Deko Products

Revision History

Date Revised	Changes Made
2 January 2007	Updated for new Avocent model information

Overview

Avid has been developing networked production equipment for years, enabling us to deliver field-validated solutions that are proven to meet today's broadcast production requirements. Avid's on-air graphics solutions leverage the same high speed networking technologies and interoperability that is pioneered by the IT industry.

Standard IT platforms provide an open architecture that allows for expansion using third party devices. However, special care must be taken to assure proper operation and to avoid adversely affecting the on-air performance of your systems.

This application note will provide guidelines and recommendations for using the following peripheral devices with your Deko system:

- Serial Port Expansion
- KVM Switching and Extension
- External Storage

Note: Search the Avid Knowledge Base (http://www.avid.com/onlinesupport) for the most up-to-date information that might have become available after the documentation was published.

Contents

Serial Port Expansion

All of Avid's Deko hardware platforms include at least one industry standard RS-232 serial Port. With the Deko application, RS-232 ports can be used for external automation control (via III protocol) or for GPI triggering.

Some of the Deko models include only a single RS-232 port (see the Installation Guide shipped with your system for details). For applications that require multiple RS-232 ports, external RS-232 port expansion devices can be attached to your Deko system. These devices can be connected to one of the USB ports on the Deko system.

Not all serial port expansion devices will function with the Deko application. Therefore, Avid recommends the following third-party products. These devices have been fully qualified to operate with the serial control and GPI functionality that the Deko applications require.

Digi®

http://www.digi.com/products/usb/edgeport.jsp

The Edgeport® series of converters from *Digi* (formerly Inside Out Networks) offers USB to RS-232 converters with 2, 4 and 8 ports. The following Edgeport products have been qualified with Deko products:

- Edgeport/2 – *USB to 2 port RS-232 Serial*
- Edgeport/4 – *USB to 4 port RS-232 Serial*
- Edgeport/8 – *USB to 8 port RS-232 Serial*

IOGear®

http://www.iogear.com/main.php?loc=product&Item=GUC232A

IOGear makes a simple USB to RS-232 cable that has also been qualified for the GPI and Serial control functionality of the Deko Products. Model # GUC232A, USB to Serial/PDA Converter Cable.

PI Manufacturing

http://www.pimfg.com/

PI Manufacturing Corporation. also makes a simple USB to RS-232 cable that has been qualified for the GPI and Serial control functionality of the Deko Products. Model # UN8BE, USB to RS232/Serial Cable.

Note: Avid is providing this list only as a guideline and a recommendation. There are additional USB to RS-232 converters that can be used, but the responsibility is left to the customer to assure proper operation.

KVM Switching and Extension

Avid's FastAction Keyboard (FAK) provides a dedicated Deko keyboard that gives single stroke functionality for most Deko functions and features. While the FastAction Keyboard uses a standard PS/2 connection to the Deko chassis, it requires a special protocol that is not compatible with standard KVM Extenders and Switches that are available on the market.

Avocent®

http://www.avocent.com/

Avid has established a partnership with Avocent to provide both KVM Extension and KVM Switching capabilities that are compatible with Avid's FastAction Keyboard. Avocent, who is a leading provider of KVM Switching solutions, has enhanced the feature set of certain products to fully support the functionality of the FAK.

The Avocent equipment may require specific configuration settings to work with the FAK. Please contact Avocent Technical Support for details: In the US, call 1-888-793-8763; for other countries, refer to Avocent's support contact page at http://www.avocent.com/web/en.nsf/Content/Contact+Support .

Avocent® AMX® Series

Avocent's AMX® Series of products provides a highly scalable enterprise level KVM switching solution. This series will now support the FastAction Keyboard and has been fully qualified by Avid and Avocent.

The AMX Series includes several different components that can be configured to fit most any KVM Switching or KVM Extension solution. All of the connections between the AMX devices are over an industry-standard UTP cable.

The specific components provided by Avocent are described below:

- AMX®5000 KVM

The AMX5000 KVM switch is an 8x32 analog Avocent KVM switch that supports up to 8 keyboards and 32 CPUs.

- AMX®5010 KVM Switch

The AMX5010 KVM Switch is a 16x64 analog Avocent KVM switch that supports up to 16 keyboards and 64 CPUs.

- AMX®5020 KVM Switch

The AMX5020 KVM Switch is a 4x42 analog Avocent KVM switch that supports up to 4 keyboards and 42 CPUs.

- AMX®5030 KVM Switch

The AMX5030 KVM Switch is a 4x16 analog Avocent KVM switch that supports up to 4 keyboards and 16 CPUs.

- AMX®5121 User Station

The Avocent AMX5121 desktop user station provides access from your desk to one AMX KVM matrix switching system and one local computer. The AMX5121 user station supports PS/2 and USB keyboards and mice and automatic video skew compensation.

- AMX®5130 User Station

The Avocent AMX5130 desktop user station provides access from your desk to an AMX KVM matrix switching system and one local computer. The AMX5130 user station supports PS/2 and USB keyboards and mice, automatic video skew compensation, and audio and serial connectivity.

KVM Extension Using the AMX® Series

The AMX5121 User Station can be used alone to extend your KVM station (including FAK) to a distance of up to 1000 feet (see Avocent product information for details) from the Deko chassis. The diagram below shows this configuration.
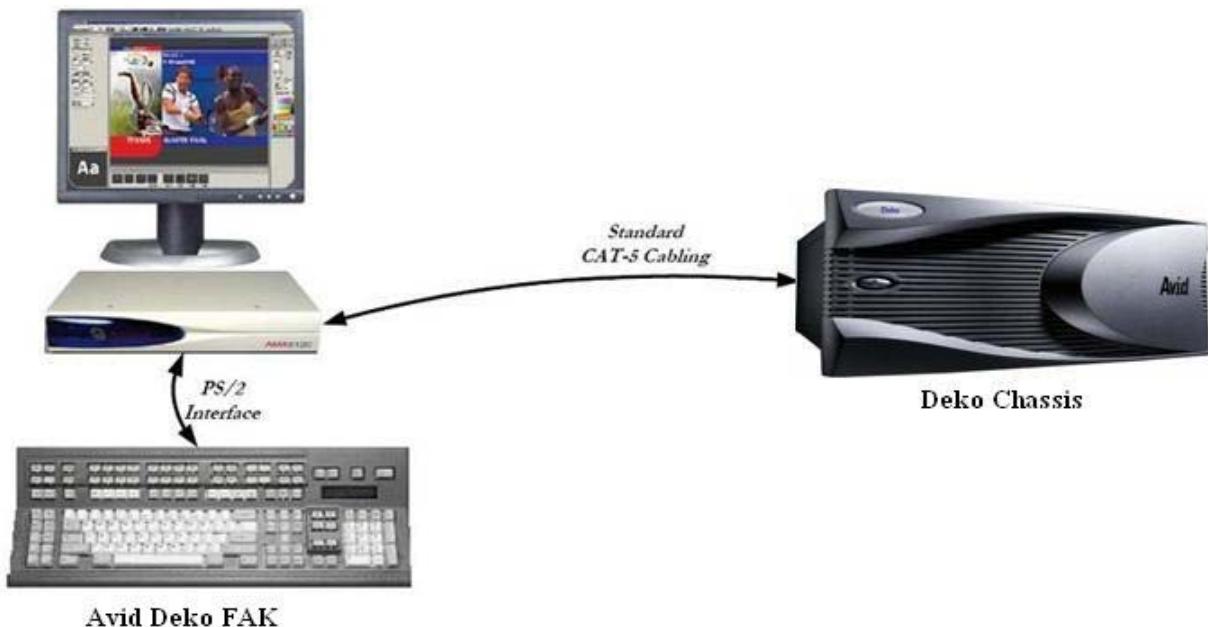
KVM Switching Using the AMX® Series

Multiple FastAction Keyboards and Deko Chassis can be connected through any model AMX chassis to facilitate sharing of multiple Deko systems. The diagram below shows this configuration.
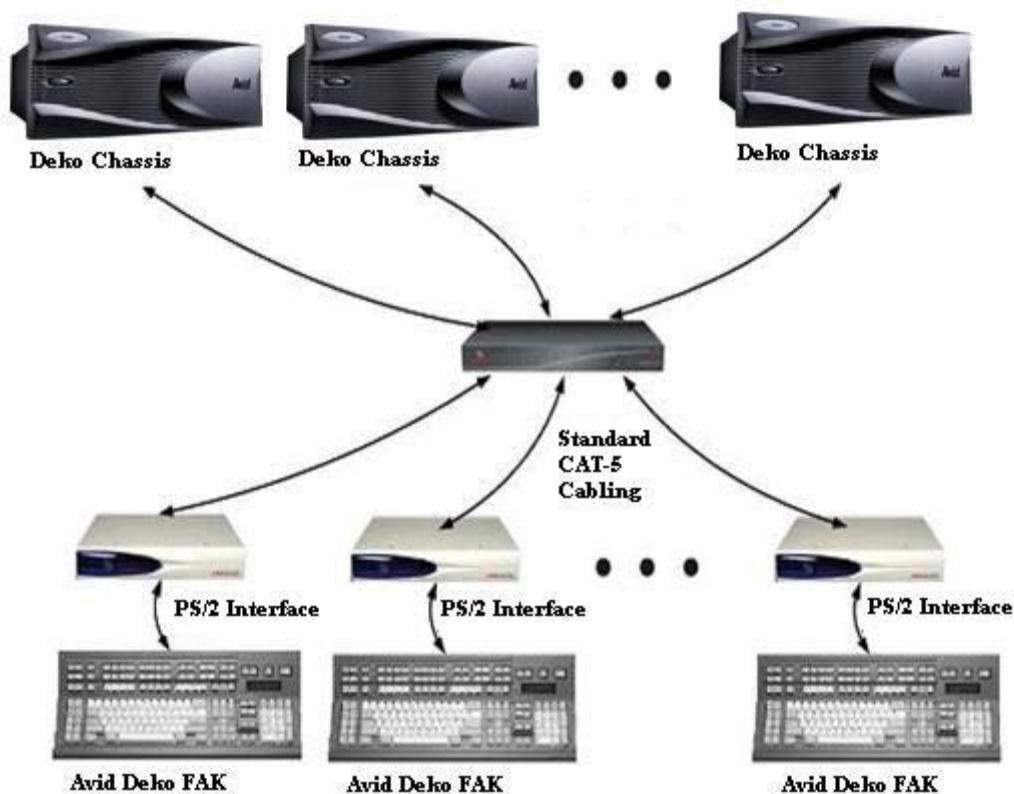
Avocent® LongView® Series

The LongView® Series from Avocent extends a keyboard, monitor, mouse, speakers, microphone and serial port up to 1000 feet away from the computer or KVM switch with one Category 5 UTP cable. The following LongView models have been qualified to work with the Avid FastAction Keyboard.

- LV 430-xx: Transmitter/Receiver Pair – for extension up to 500 feet away (Note: xx = "AM" American version or "EU" European version).

- LV 1000P: Receiver with PS/2 Transmitter – for extension up to 1000 feet away.

Avocent® Emerge™ Series

The Avocent® Emerge™ ECMS1000 extender allows PS/2 and USB keyboard, video and mouse (KVM) peripherals to work seamlessly from up to 1000 feet away from your server. Standard UTP cabling makes installation simple and keeps costs low. The ECMS1000 receiver can be rack mounted, desk mounted or mounted on the back of your monitor.

ECMS 1000P: Receiver with PS/2 Transmitter.

For detailed technical information on these and other Avocent products, refer to their website at http://www.avocent.com . Contact Avocent Sales at 800-275-3500 for more information.

For customer support in the US, call 1-888-793-8763; for other countries, refer to Avocent's support contact page at http://www.avocent.com/web/en.nsf/Content/Contact+Support .

External Storage Devices

Many of Avid's Deko hardware platforms include industry standard USB and/or 1394 ports (see the Installation Guide shipped with your system for details). These expansion ports can be used for installing third-party external devices to expand the capabilities of your Deko system.

In using external third party devices, special considerations must be followed to avoid adversely impacting the performance of your On-Air Deko system. Avid strongly recommends the following guidelines as summarized below.

- **Virus Protection.** Attaching external storage devices can be a common means of infecting your Deko system with viruses. It is strongly recommended that a virus scan is performed on any external storage device before attaching it to your Deko System. Please see the "Virus Protection Recommendations for Avid's On-Air Graphics Systems" white paper for official guidelines and details.

- **Using External Drives for Clip Storage.** Avid strongly recommends that external hard drives (USB or 1394) are only used for transferring clips to your Deko Platform. Recording or Playback of clips to an external drive may adversely impact the performance of the Deko System.

- **Partitioning External Drives.** When setting up an external hard drive (USB or 1394) DO NOT make the external drive partition ACTIVE. This may prevent your Deko system from booting if the external drive is disconnected. The only way to recover from this situation is to perform a complete system restore on the Deko system.

Technical Support Information

Most products feature a number of coverage options. Avid Assurance service offerings are designed to facilitate your use of Avid solutions. Service options include extended telephone coverage, automatic software maintenance, extended hardware warranty, and preferred pricing on replacement parts. Offerings and options may vary by product and are not available for all products.

For more information regarding Avid's service offerings, visit www.avid.com/support or call Avid Sales at 800-949-AVID (800-949-2843).

Program availability and details might vary depending on geographic location and are subject to change without notice. Contact your local Avid office or your local Avid Reseller for complete program information and pricing. However, if you need help locating an Avid office or Avid Reseller near you, please visit www.avid.com or call in North America 800-949-AVID (800-949-2843). International users call 978-275-2480.

Accessing Online Support

Avid Online Support is available 24 hours per day, 7 days per week. Search the Knowledge Base to find answers, to view error messages, to access troubleshooting tips, to download updates, and to read/join online message-board discussions.

To access Avid Online Support:

➢ Go to www.avid.com/onlineSupport.

To access Avid Community Forums:

➢ Go to http://www.avid.com/exchange/forums/default.aspx

Note: Supplemental documentation, if available, is provided on the Knowledge Base. For the latest up-to-date information, browse the Knowledge Base at Avid Online Support.

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Send us your reels and we may use your footage in our show reel or demo!